

# Ambrosia Limited- A Cold Chain Dilemma

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## ABSTRACT

When a Zonal Sales Manager is seen fighting at a C&F Office, it is an unusual sight. However at Ambrosia Limited, a renowned name in Poultry products, a simple supply chain dilemma has made it a regular affair. Though the policy of company officials of completely managing the C&F's has been smooth, there has always been a problem when it came to supply chain. Be it over stocking or excessive rejections from customers, such uncertain issues at times expose the weak link of poor supply chain policies in the company, thus creating potential rift between the company officials and the C&F owner. Even last year the Zonal Sales Manager was greatly upset during the rainy season where great amount of products were not utilised thus creating losses, for which no body was ready to take the responsibility.

The upcoming monsoon season might bring a whole new set of problems as the particular problem could again play a critical role in damaging profits.

**Keywords:** Cold Chain, Supply Chain, C&F Agent, SCM, Poultry, Ambrosia and SCM Disputes

## INTRODUCTION

The importance of a properly managed supply chain management system can never be ignored, especially in the field of eateries. As per Narasalagi and Hegade (2013), supply chain management is very critical for agricultural products much to the fact that the products are perishable and have a very short shelf life. They also suggested that supply chain management plays an integral role in keeping business costs at a minimum and profitability as high as possible by significant reduction in the wastages of fruits and vegetables which benefit both the farmers as well as consumers by means of increased returns. In a very in-depth study by Jalil, Hussain and Siddiqi (2013) which was based on meat products supply chain management, the resultant study showed that meat distribution system can be discerned into four main categories, such as big shopkeeper shaving five percent market share who purchase animals directly from other animal markets outside the city and sell the meat at their shops. The second category of meat shopkeepers having 30% market share, they purchase animals from local animal market. Third category comprising 55% of total meat sale is wholesale marketing by middlemen. Small shopkeepers purchase slaughtered animals from slaughterhouses on wholesale rates for further selling at their shops. The last

category is dealer/supplier's which has the remaining 10% of market share. They buy meat from slaughter houses and wholesalers to supply it to hotels/restaurants and others.

## REVIEW OF LITERATURE

Hsiao, Vorst, Kemp, and Omta (2008) conducted a study and based on the findings of the study, concluded that in order to maintain the quality of food products, logistics plays a major role.

Smith (2006) also identified logistics as the key player in influencing the quality and safety as well as preserving the safety standards of the food products.

Kelepouris, Pramataris and Doukidis (2007); Henderson, (1994); Fearne and Hughes (1999) and Hsiao *et al.* (2008) also identified many elements like transportation, warehousing, value added services, storage and handling of the stock, third party service providers etc. as the main contributors to the logistics cost. Proximity, network complexity and product specificity were identified as other important factors influencing the cost.

Manikas and Terry (2009) conducted a survey and identified poor infrastructure and improper utilisation of facilities as other factors affecting the effectiveness of

cold chain.

Liu and Wang (1999) through their survey report conducted after extensive field work, highlighted the importance of clarity of work and role play in maintaining the relationship between the third party logistics/outsourcing logistics players and the company. This relationship is enhanced through clear division of work and authority as well as mutual understanding between the parties. As per the survey, the company shouldn't depend too much on the distributors.

## THEORETICAL FRAMEWORK

### Supply Chain and Cold Chain

Supply chain is a vigorous and complicated network of demand and supply. It is an arrangement of organisations, people, activities, information, resources and utilities required for crusading a product or service from the point of origin to the point of consumption. It is an activity beyond boundaries. It surpasses several stages to transfer the right product at the right place on the right time. Supply chain activities are vivid and broad. It is not mere movement of goods or services, it is an activity that ensures efficiency and effectiveness throughout the process.

Cold chain may be understood as a special type of temperature controlled supply chain that is a physical process dominant in the processed and semi-processed food industry. As per Bishara's (2006) definition, cold chain is classified as the supply chain of perishable items. Some other places where cold chain is dominantly used is in the pharmaceutical and chemical industry.

As compared to supply chain, cold chain requires specific infrastructure and the products in a cold chain, high on perishability, stand a greater risk of spoilage. However, cold chain activities require the same sustainability and maintenance as the supply chain activities.

### Research Design

The case study is disguised in nature and data were collected from a well-known poultry products C&F agent in Indore. For primary data, interview was conducted on the office location of the C&F agent and for secondary data various journals, e-journals, magazines, research studies and articles were considered. The study utilised both primary data and secondary data to derive a relevant teaching case study in supply chain management. The analysis of the data was qualitative in nature and was done

as per author's observation on spot and prior experience in industry and academics.

### The Case

Ambrosia Limited was established in 1962, to produce day-old layer and broiler chicks for the dense poultry markets of North and Central India. Over the years, Ambrosia Limited embarked upon new ventures in regular succession, adding tremendous value to the company, giving it an edge in technology and high returns on investment. The company has steadily grown to over 46 units spread across India with an annual turnover of Rs 20 Crores.

Today, Ambrosia Limited's impressive portfolio includes animal health products, pellet feeds, processed, and further processed chicken products, solvent oil extraction, and SPF eggs. The company's Specific Pathogen Free Egg unit (in technical collaboration with SPAFAS Inc. USA) is among four such units in the world and the only one of its kind in the developing world. Diversifying from mainstream poultry products, Ambrosia Limited had added to its credit, manufacturing facilities for nutritional health products for humans, pet food and health care products. The company had been consistently been ranked among the 100 best global small companies by numerous international business publications.

Central India has always been a source of unexplored opportunity for businesses. With a wide area and a strategically located industrial belt, the region offered Ambrosia a scope for growth beyond their imagination. Soon the company set up its operations in the central India and was welcomed by the network of distributors and retailers who were keen on exploring a rather new area of business. As an outcome of increased business opportunities in central India, Ambrosia Limited contracted a C&F for opening outlets in Indore. As per the policy of the company Mr. Trivedi, a young and dynamic professional and marketing head of Ambrosia Limited along with Mr. Arun Chopra were given sole responsibility of handling successful operation of C&F in Indore. Under the guidance of Mr. Trivedi the sales team at the Indore C&F managed to outperform the C&Fs in other cities. Despite a small employee base of eight people, Mr. Trivedi was handling the C&F along with the support of Mr. Chopra very efficiently and effectively.

Logistics has always been a balanced mix of the four elements, namely, distribution, transportation, material handling, and location decisions. The transportation of Ambrosia Ltd was handled by third party logistics

solution providers who were also responsible for taking care of the material handling and safety. The primary task for Ambrosia was to determine strategic location for distribution of their products. This task was equally important and depended on the C&F agent who distributed their products on his margin. The C&F in Indore was located in a residential area in the heart of the city as the company officials believed that it was a strategic location since most of the distributors and retailers were in its close vicinity. Mr. Trivedi had many times complained about the shortage of storage space to the owner of C&F along with other supply chain issues such as material stacking and storage to the C&F Owner Mr. Kunal Verma. He realised that Mr. Verma was least bothered about this problem as his only concern was to earn commission on the sales made by Mr. Trivedi's sales team. Apart from seasonal inflections which are high among poultry products, loss of stock due to damage in transit was also causing a dent in the company profit. The third party logistics solution provider (transporter) blamed the poor storage conditions to be the factor contributing in the damage in inventory in transit. The recovery from insurance was also a very cumbersome and time consuming task. All these factors were leading to loss of existing as well potential customers for Ambrosia apart from denting their market reputation.

However, recently Mr. Trivedi was worried due to problems related to cancellation of orders in large numbers due to spoilage, a result of temperature fluctuation. Mr. Trivedi overviewed this problem and came to the conclusion that the varying climate during the period of transit along with improper transit storage have resulted in the problem. The transporter however differed in his opinion and held the improper storage conditions to be responsible for the losses.

The C&F agent on the other hand believed that the problem was location. Despite having a much larger storage area near the bypass road, the company executives wanted the place to be within the city. He also believed that not only did the current location increase operational costs but also increases the transit time drastically, a reason for the spoilage. His view was also supported by the third party logistics provider who believes that taking this step would improve the storage and refrigeration conditions since the location will act as a central point and a hassle free network for further distribution.

With a difference in opinion the responsibility for improper functioning of C&F in Indore had been put on the shoulders of both Mr. Trivedi and Mr. Verma. The Head Quarter is ready to implement complete cold chain solution from the company warehouse to the C&F agent with an additional charge, to which the C&F disagrees. Complete cold chain solutions require continuous mapping and tracking thus ensuring that the storage

area has adequate airflow and temperature controls and systems for risk mitigation. Also the documentation and quality checks involved in the process are bureaucratic and quantitative in nature. Today Mr. Trivedi considers the entire situation as a difficult nut to crack hence has to decide to choose either of the alternatives at the earliest.

## CASE/DATA ANALYSIS AND DISCUSSION

### Do you Believe that a Complete Cold Chain Supply will Rectify the Problem?

Adopting a complete cold supply chain solution may be a recommended step to rectify the problem for Ambrosia Limited. However this may require Ambrosia Limited to invest significant amount on infrastructure and other facilities. Through the current state of available logistics facilities are very limited for Ambrosia Limited to take this step. It would hence be suggested for Ambrosia Limited to rework on a compromise between the C&F agent and other chain intermediaries that would both be feasible financially as well as infrastructurally. The preservation of the adequate storage and handling conditions (temperature) throughout the cold supply chain along with the quality assurance and other standardised operation procedures (SPOs) covered under the quality check will be a herculean task for the company. This has to be taken care of by the company prior to making any important decision on complete cold chain solution.

### As Suggested by the C&F Agent, do you Believe that the Location Change Can Make a Difference to the Problem?

Changing the location may provide a positive solution though not a complete solution to the problems faced by Ambrosia Limited. Location plays a central role in logistics and is an important element that contributes to the cost of supply chain. The overall efficiency and effectiveness of a supply chain depends on the four elements of logistics (distribution, location, warehousing, and transportation) of which location is of prime importance. The third party taking care of the transportation of the products also prefers the location on bypass. This step would ensure proper storage, refrigeration and stacking of the products alongwith the location at bypass acting as a central point for further distribution. As the market in central India is growing at a healthy rate, this location at bypass would also prove to be a blessing in disguise for future growth opportunities.

## How can The Losses for Ambrosia Limited be Reduced in The Current Scenario?

Ambrosia Limited should develop a comprehensive supply chain management strategy along with all the members of its chain. This network should be designed keeping in mind all the elements of its logistics system. The objective should be to reduce cost and improve the efficiency thereby keeping intact with the 7R's of Logistics. The role of the third party logistics providers is high here as they are bestowed with the task of reducing the bullwhip effect, an important element contributing in the losses thereby affecting the market position of the company. It is therefore very important for the company to design their strategies in synchronisation with the strategies and objectives of their third party solution providers so that both the members benefit mutually.

### CONCLUSION

To ensure greater efficiency and effectiveness across the cold chain activities, every element of the distribution network forms an important link. The cold chain activities are however more demanding and challenging which is why companies need to be very vigilant and focused. All the third party logistics players and the C&F agents can play the role of catalysers in improving and smoothening the activity cycle of the cold chain. Companies also need to understand this prominent role played by the C&F agents and should offer them more freedom to take their decisions to strengthen the network.

### LIMITATIONS

This case study has some limitations. The dominant one being that this case presents only two points, one of the manager of the company and other of the C&F agent. As understood from above, cold chain activities is a network of members working together to integrate the demand and supply activities, this case due to several constraints has ignored the view points of the other important chain members. Due to this the perspective presented in the case may not be unbiased.

### FURTHER RESEARCH DIRECTIONS

Further research may be carried out to broaden the scope of this case study by incorporating the view points of the other players in the cold chain. The validity of the

case may be improved by including scientific theories on cold chain. Similarly research may also be carried out to identify the specific factors leading to disagreements and hurdles among the various chain members.

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